# **TABLE OF CONTENTS**

About the Remote Controlpage 2
Remote Control Signals: UHF or IRpage 2 Installing Batteries in the Remote Controlpage 3 Remote Control Modespage 3
Using the Remote Control Buttonspage 4
SAT (Satellite Receiver) Modepage 4 TV (Television) Modepage 8 VCR (VideoCassette Recorder) Modepage 10 AUX (Auxiliary) Mode for Cable TV Boxpage 12 AUX (Auxiliary) Mode for Tuner or Amplifierpage 13
Remote Control Procedurespage 15
Controlling a Device
Device Codespage 22
TVs
Trouble-Shooting Tablepage 26
Limited Warrantypage 28
If You Mood Holm

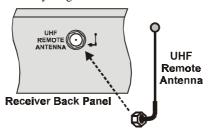
# Remote Control Signals: UHF or IR ABOUT THE REMOTE CONTROL

The remote control gives you easy access to all the features of a DISH Network<sup>TM</sup> satellite TV system. You can set up the remote to control up to three devices other than the satellite TV receiver. The three devices may include a TV, a VCR, a DVD player, a cable TV box, a tuner, or an audio amplifier.

#### REMOTE CONTROL SIGNALS: UHF OR IR

- The remote control uses Ultra-High Frequency (UHF) radio signals to control the satellite TV receiver. UHF signals travel long distances (100 feet or more) and go through walls and other solid objects. Because UHF signals travel so far, the receiver may respond to signals from other nearby remote controls. To handle this problem, see *Changing the Remote Control Address* on page16. If this does not work, see *Installing an Attenuator* on page17.
- To use the remote to control the receiver, you must attach the UHF antenna to the receiver back panel UHF Remote Antenna connection.

**Note:** To be able to use the remote control over the longest possible distance, place the antenna straight up. Do *not* let the antenna touch anything.



• The remote control uses Infra-Red (IR) light signals to control devices other than the receiver. IR signals travel only short distances (40 feet or less), and *cannot* go through walls or other solid objects. You *must* point the remote control directly at the device, with *no* objects blocking the line of sight.

#### Installing Batteries in the Remote Control

# INSTALLING BATTERIES IN THE REMOTE CONTROL

The remote control comes with AAA batteries, packaged separately. When you replace old batteries, you should replace *all* of the batteries. Use batteries of the same grade, *for example*, alkaline or carbon zinc, and do *not* mix batteries of different grades. Alkaline batteries provide longer battery life.

- Press down on the slot in the battery cover (on the back of the remote control) and slide the cover off.
- Insert the new batteries, making sure to match the plus ("+") ends with the plus markings on the battery case.
- 3. Replace the battery cover by sliding the cover back up into place.





#### REMOTE CONTROL MODES

To use the remote to control a device such as the satellite receiver or a TV, you *must first* set up the remote to control the device, *and then* set the remote to the right mode for that device.

- 1. Set up the remote to control the device. See *Controlling a Device* on pag e15 for instructions.
- 2. Use the remote control mode buttons, SAT (satellite receiver), TV, VCR (for a VCR or a DVD player), and AUX ("auxiliary," for a cable TV box, a tuner, or an audio amplifier) to set the remote to the right mode for the device. To change the mode setting, press the button for the device that you want the remote to control. The mode button's back light turns ON to show that the remote is set to that mode.



ATTENTION!

The following sections describe how to use the remote control buttons. Each section describes *only* the buttons that work in *one* remote control mode, *for example* **SAT** mode or **TV** mode.

# SAT (Satellite Receiver) Mode USING THE REMOTE CONTROL BUTTONS

#### SAT (SATELLITE RECEIVER) MODE



Some of the features described below may *not* apply to your satellite receiver. See the receiver *User Guide* for details about the receiver's features. If a remote control button is *not* described in this section, it does *not* work in **SAT** mode.



# SAT MODE BUTTON

The remote control *already* is set up to control the satellite receiver. But, you *must* press the **SAT** mode button to set the remote to **SAT** mode. The **SAT** mode button's back light turns ON to show that the remote is set to **SAT** mode. Make sure to keep the remote in **SAT** mode to use the buttons as described in this section.



## AUX MODE BUTTON

Set up the remote to control the television and do *not* setup the remote in **AUX** mode. If you do this, then with the remote in **SAT** mode you can press the **AUX** mode button to turn the television ON or OFF. This allows you to turn the TV on or off without leaving **SAT** mode.

#### TV/VIDEO



#### TV/VIDEO BUTTON

If you connect the receiver using *only* its back panel RF or VHF connections, use this button to switch the receiver between the satellite signal (routed into the receiver's **Satellite In** input) and another video signal such as cable or broadcast TV antenna input (routed into the receiver's **TV Antenna Cable In** input).





Press this button to open the Main Menu.

### SAT (Satellite Receiver) Mode



Press this button to turn the receiver ON or OFF. The green **Power** light on the receiver front panel lights up to show that the receiver is ON, and goes out to show that the receiver is OFF.



# PAGE UP AND PAGE DOWN (ARROW) BUTTONS

Press the **Page Up** button or the **Page Down** button to scan, page by page, through the **Program Guide**, a **Themes** menu, a **Favorite List**, an **Event Timers** list, or a list of channels.



Press this button to turn off the sound. Press it again to restore the sound.



Press the left-hand, minus (-) side of this button to lower the sound volume. Press the right-hand, plus (+) side of this button to raise the sound volume.



#### GUIDE BUTTON

Press this button to open the **Program Guide**. When the **Program Guide** is open, press this button to switch among **Favorite Lists**.



Press this button to select a highlighted option or program in a menu.

#### SAT (Satellite Receiver) Mode



# UP/Down/LEFT/RIGHT (ARROW) BUTTONS

- When using a menu, press these buttons to move the highlight to an option.
- When watching a program, press the Right button to open the Browse Banner or the Up or Down button to change channels.
- When the Browse Banner is open, press the Up or Down button to see the Browse Banner for the next channel.
- When a menu offers a list of choices (different from menu options), press the Up or Down button to see more choices.
- When the **Program Guide** is open, press these buttons to move the highlight among the programs.
- To enter a number in a menu, highlight the place where you need to enter the number. Then, press the **Up** or **Down** button to increase or decrease the number in the highlighted field. Or, you may use the **Number Buttons**.
- When the Browse Banner is open, press the Right or Left button to display the current program or the next program on a channel.
- When watching a program, press the Left button to open the Themes menu.



#### RECALL BUTTON

Press this button to return to the last channel you were watching. Press it again to switch between the last two channels that you watched.

### SAT (Satellite Receiver) Mode



# INFORMATION (INFO) BUTTON

- Press this button for more information when the
   Program Guide or the Browse Banner is open, or when watching a program.
- When a menu is open that includes a Help option, press this button to see help information for that menu.
- Highlight a program in a Themes list and then press this button for more information on that program.
- When the receiver is OFF, press this button to display the Important System Information menu.



# VIEW BUTTON

- Press this button to return to watching a program.
- If you are watching a program, press this button to briefly display the Program Banner.
- While using any menu, press this button to cancel a procedure and return to watching a program.



#### CANCEL BUTTON

Press this button to cancel a procedure and to return to the previous menu or to watching a program.



# SYS INFO SYSTEM INFORMATION (SYS INFO) BUTTON

Press this button to display the **Important System Information** menu.

#### TV (Television) Mode



#### **NUMBER BUTTONS**

- When watching a program or with the Program Guide open, use these buttons to enter a channel number to change to that channel.
- When the Program Guide is open, enter a number of hours using these buttons, and then press the Right or Left arrow button to skip the display backward or forward by that number of hours.
- Use these buttons to enter menu option numbers. For an option that has a number, you may do this *instead* of highlighting the option and then pressing the **Select** button.
- Use these buttons to enter numbers in a menu. To do this, first highlight the place where you need to enter the number. Next, press a number button (or, you can use the Up/Down arrow buttons to enter the number). Then, move the highlight to the place for the next number that you need to enter, or press the Select button if you are done entering numbers.



## POUND BUTTON

Use this button in Changing the Remote Control Address on page 16.

## TV (TELEVISION) MODE



Some of the features described below may *not* apply to the TV. See your TV owner's manual for details about the TV's features. If a remote control button is *not* described in this section, it does *not* work in **TV** mode.



To use the remote to operate a television, you *must first* set up the remote to control the television. See *Controlling a Device* on page 15. *Then*, you *must* press the **TV** mode button to set the remote to **TV** mode. The **TV** mode button's back light turns ON to show that the remote is set to **TV** mode. Make sure to keep the remote in **TV** mode to use the buttons as described in this section.

#### TV/VIDEO



#### TV/VIDEO BUTTON

If the TV has video input options, use this button to switch the TV among those options.



#### POWER BUTTON

Press this button to turn the television ON or OFF.



#### MUTE BUTTON

Press this button to turn off the sound. Press it again to restore the sound.



#### **VOLUME BUTTON**

Press the left-hand, minus (-) side of this button to lower the sound volume. Press the right-hand, plus (+) side of this button to raise the sound volume.



#### SELECT BUTTON

The **Select** button works as the **Enter** button for a TV.

### VCR (VideoCassette Recorder) Mode



Use the **Up/Down** arrow buttons to change channels on the TV.



# RECALL BUTTON

Press this button to return to the last channel you were watching. Press it again to switch between the last two channels that you watched.



Use these buttons to enter numbers in a menu.

# VCR (VIDEOCASSETTE RECORDER) MODE



Some of the features described below may *not* apply to the VCR. See your VCR owner's manual for details about the VCR's features. If a remote control button is *not* described in this section, it does *not* work in **VCR** mode.



# CR MODE BUTTON

To use the remote to operate a VCR, you *must first* set up the remote to control the VCR. See *Controlling a Device* on pag e15. *Then*, you *must* press the VCR mode button to set the remote to VCR mode. The VCR mode button's back light turns ON to show that the remote is set to VCR mode. Make sure to keep the remote in VCR mode to use the buttons as described in this section.

# VCR (VideoCassette Recorder) Mode



You *must* set the remote control to **VCR** mode to set it up to control a DVD player. You *must* set the remote control to **VCR** mode to use it to control a DVD player.



# MUTE BUTTON

Press this button to turn off the sound. Press it again to restore the sound.



# VOLUME BUTTON

Press the left-hand, minus (-) side of this button to lower the sound volume. Press the right-hand, plus (+) side of this button to raise the sound volume.



## SELECT BUTTON

The **Select** button works as the **Play** button. Press this button to play or to resume playing a videotape.



# UP/Down/LEFT/RIGHT (ARROW) BUTTONS

- The **Up** arrow button works as the **Stop** button. Press this button to stop a videotape.
- The **Down** arrow button works as the **Pause** button.
   Press this button to pause a videotape. Press this button or the **Select** button (**Play**) to restart the tape.
- The Left arrow button works as the Rewind button.
   Press this button to rewind a videotape.
- The **Right** arrow button works as the **Fast Forward** button. Press this button to forward a videotape.

#### AUX (Auxiliary) Mode for Cable TV Box



Use these buttons to enter numbers in a menu.

### **AUX (AUXILIARY) MODE FOR CABLE TV BOX**



Some of the features described below may *not* apply to the cable TV box. See your cable box owner's manual for details about the box's features. If a remote control button is *not* described in this section, it does *not* work for a cable TV box.



# AUX MODE BUTTON

To use the remote to operate a cable TV box, you *must first* set up the remote to control the cable box. See *Controlling a Device* on page 15. *Then*, you *must* press the **AUX** mode button to set the remote to **AUX** mode. The **AUX** mode button's back light turns ON to show that the remote is set to **AUX** mode. Make sure to keep the remote in **AUX** mode to use the buttons as described in this section.



#### MUTE BUTTON

Press this button to turn off the sound. Press it again to restore the sound.



Press the left-hand, minus (-) side of this button to lower the sound volume. Press the right-hand, plus (+) side of this button to raise the sound volume.

### AUX (Auxiliary) Mode for Tuner or Amplifier



The **Select** button works as the **Enter** button for the cable box.





Use the **Up/Down** arrow buttons to change channels on the cable box.



# RECALL BUTTON

Press this button to return to the last channel you were watching. Press it again to switch between the last two channels that you watched.









Use these buttons to enter numbers in a menu.



# STAR BUTTON

Use this button to set up the remote control in AUX mode.

## **AUX (AUXILIARY) MODE FOR TUNER OR AMPLIFIER**



Some of the features described below may *not* apply to the tuner or amplifier. See the device owner's manual for details about the device's features. If a remote control button is *not* described in this section, it does *not* work for a tuner or amplifier.

#### AUX (Auxiliary) Mode for Tuner or Amplifier



#### AUX Mode Button

To use the remote to operate a tuner or amplifier, you *must first* set up the remote to control the device. See *Controlling a Device* on page 15. *Then*, you *must* press the **AUX** mode button to set the remote to **AUX** mode. The **AUX** mode button's back light turns ON to show that the remote is set to **AUX** mode. Make sure to keep the remote in **AUX** mode to use the buttons as described in this section.



# MUTE BUTTON

Press this button to turn off the sound. Press it again to restore the sound.



# VOI UME BUTTON

Press the left-hand, minus (-) side of this button to lower the sound volume. Press the right-hand, plus (+) side of this button to raise the sound volume.



#### SELECT BUTTON

This button works as the **Input Select** button for a tuner or amplifier.



# UP/Down (ARROW) BUTTONS

Use these buttons to change channels on the tuner or amplifier.



#### STAR BUTTON

Use this button to set up the remote control in AUX mode.

#### REMOTE CONTROL PROCEDURES

#### **CONTROLLING A DEVICE**

This section explains how to set up the remote to control a device, such as a satellite TV receiver, a TV, a VCR, a cable TV box, a tuner, or an amplifier.

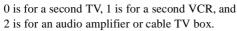
**Note:** The remote *already* is set up to control the receiver. *But*, if the receiver has its own volume control, then when you first install it, it is set up so that the remote *cannot* control the receiver sound volume. If you want to set up the receiver so that the remote *can* control the receiver volume, see *Receiver Volume Control* on pag e18.

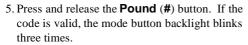
- Turn ON the device you want the remote to control, using the device's buttons or the remote control that came with the device.
- Find the brand name of the device in the tables that start
  on page 22. If the brand is not listed, see *Doing the Device Code Scan* on page 20.
- 3. Press and hold the mode button for the device that you want the remote to control, for about three seconds. When all the other mode button backlights come on, release the mode button.

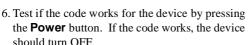


4. Use the number buttons to enter the code for the device.

**Note:** For the **AUX** mode, you *must* enter a 4-digit code. The first digit is the code for the device, as follows:















7. Turn the device back ON and try some other buttons to make sure they work. Sometimes, the **Power** button may work when other buttons do not. If the code works for other buttons, stop here.

#### Changing the Remote Control Address

- 8. If the code you entered does not work, repeat steps 3 through 7 using another code from the tables.
- 9. If you have tried all of the codes listed for the device without success, or if you cannot find the device brand name in the tables, see *Device Code Scan* on pag e20.

#### CHANGING THE REMOTE CONTROL ADDRESS

**Note:** Do *not* change the address of the remote unless absolutely necessary, because the remote *cannot* control the receiver if the two devices have different addresses. If you start doing this procedure and then do not press any button for 20 seconds, the remote will end the procedure. Just start over again.

**Note:** This procedure shows *examples* of menu options. The options that you see may differ.

Display the Important System Information menu.
 Note the Remote Address shown on this menu.

To do this:

**Either:** Press the **System Information** button.

or: a) Press the Menu button.

- Select the **System Setup** option.**Note:** This step does *not* apply to some receivers.
- c) Select the **Installation** option.
- d) Select the **System Info** option.
- Press and hold the SAT mode button about three seconds, until all the mode button backlights come on, and then release the SAT button.
- 3. Use the number buttons to enter a number from 1 to 15. The SAT mode button backlight will blink off after you enter each digit, and then come on again.



MENU
System Setup
Installation











#### Installing an Attenuator

4. Press the **Pound** (#) button. If the address you entered is valid for the remote control, the SAT mode button backlight flashes three times.



Press the **Record** button. The Remote Address on the Important System Information menu should match the one that you entered.



6. To check the address, press and hold the SAT mode button for three seconds. Then, press the Pound (#) button twice. The SAT mode button backlight flashes the same number of times



as the address.



#### INSTALLING AN ATTENUATOR

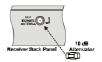
7 Press the **Select** button

Unwanted UHF signals may block signals from the remote control to the receiver. To prevent such blockage, you can install a 10 dB attenuator. This will help keep out other UHF signals, but also reduce the distance at which you can use the remote control.

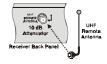
1. Remove the UHF antenna from the UHF Remote Antenna connection on the receiver back panel.



2. Attach a 10 dB attenuator to the **UHF Remote Antenna** connection.



3. Attach the UHF antenna to the attenuator.



# Controlling Sound Volume Controlling Sound Volume

#### RECEIVER VOLUME CONTROL

The receiver *may* have its own volume control. When you first install such a receiver, it is set up so that the remote *cannot* control the receiver sound volume. You can set up the receiver so that the remote *can* control the receiver sound volume.

**Note:** You should use the receiver remote to control the sound volume for normal viewing. But, if you are recording a program using a VCR, and you *change* the sound volume using the receiver remote, the volume recorded *also* will change. So, you may want to set up the receiver so that *only* the TV remote can control the sound volume. Then, when you use the TV remote to change the volume, the volume recorded will *not* change. When you are finished recording, make sure to change the receiver setup back so that the receiver remote *can* control the sound volume.

To change the way sound volume is controlled, do the following:

**Note:** This procedure shows *examples* of menu options. The options that you see may differ.

1. Use the TV remote control to make sure that the TV sound volume is *not* turned down or muted.

**Note:** If you turn down or mute the TV sound volume using the TV remote, the receiver remote *cannot* restore the volume *even if* the receiver is set up so that the remote should be able to do so.

- 2. Press the **Menu** button.
- 3. Select the **System Setup** option.
- Select the Volume Control option.
   Note: If the System Setup menu does not display this option, the receiver does *not* have its own volume control.
- 5. Select the TV remote volume control or the DISH remote volume control option.
- 6. Select the **Save** option.

7. If you are setting up the remote control for the first time, see *Controlling a Device* on pag e15. In step 4 of that procedure, use code 222 in **TV** mode to set up the remote to control the receiver, including the receiver sound volume.

System Setup

Volume Control

Save

### **Controlling Sound Volume**

#### TV OR AMPLIFIER VOLUME CONTROL

If you set up the remote to control a television, the **Mute** and **Volume** buttons - in *any* mode - control the TV volume. This applies *whether or not* the receiver has its own volume control. This does *not* apply if you use the **AUX** mode to control a device that has a volume setting.

If you want to control a device that has a volume setting, using any remote mode, do the following:

1. Press and hold the **AUX** mode button for three seconds, then release it.



2. Press the **Pound** (#) button.



3. Press the plus (+) side of the **Volume** button.



4. Press the **0** number button.



5. Press the **Pound** (#) button. The **AUX** mode button backlight blinks three times.



To switch back to TV volume control, do the following:

1. Press and hold the **TV** mode button for three seconds, then release it.



2. Press the **Pound** (#) button.



3. Press the plus (+) side of the **Volume** button.



4. Press the **0** number button.



5. Press the **Pound** (#) button. The **AUX** mode button backlight blinks three times.



# Doing the Device Code Scan Doing the Device Code Scan

If a device is not listed in the tables or if the listed codes do not work, you can scan through all the codes, testing each one. Remember that the remote may not control some devices.

 Press and hold the mode button for the device, for about three seconds. When all the other mode button backlights come on, release the button. It will flash to show that the remote is ready for address setting.



For example

 For AUX mode *only*, use the number buttons to enter a number as follows: 0 is for a second TV, 1 is for a second VCR, and 2 is for an audio amplifier or cable TV box. Then, press the Star (\*) button.

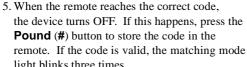






4. Press the **Up** or **Down** arrow button to set the remote to the next code. The **Down** arrow button scans backward, and the **Up** arrow button scans forward. Press the button again to continue scanning.







light blinks three times.

6. Press the **Power** button to turn the device back ON.



Try some other remote control buttons to make sure that you have the right code.

#### Finding the Device Codes

#### FINDING THE DEVICE CODES

You can find out what device code is set for each remote control mode. Do the following:

 Press and hold the mode button for the device, for about three seconds. When all the other mode button backlights come on, release the mode button.



For example



2. Press the **Pound** (#) button twice. The mode light flashes the number for each digit of the current mode, with a pause between the groups of flashes. A quick flash is for zero. For example, the mode light flashes five times, pauses, flashes seven times, pauses, and flashes quickly for the 570 code.

#### **DEVICE CODES**

Use these codes to set up the remote to control other devices. If a device is not listed or the codes do not work, the remote may not be able to control the device.

**Note:** The end of the **VCR** table provides codes for DVD players. *Only* for a receiver that has its own volume control, use code 222 with the remote in **SAT**, **TV**, or **VCR** mode to set up the remote to control the receiver sound volume.

#### **TVs**

Akai	532, 570, 573
Alba	613
A-Mark	620
Amstrad	533
Anam	509, 541, 620, 621, 691, 698
AOC	505, 506, 519, 520, 620, 695, 712
Archer	620
Audiovox	620
Bauer	611
Baycraft	536
Brockwood	695
Broksonic	562, 691
Candle	506, 522, 523, 525, 536, 691, 695, 712
Capehart	519, 695
Circuit City	695
Citizen	506, 516, 522, 523, 524, 525 , 526, 691, 712
Colortyme	573, 695
Concerto	523
Contec	527, 528, 541, 591, 691
Craig	536, 541, 691, 694
Crown	526, 536
Curtis Mathes	506, 516, 526, 573, 703, 712
CXC	541, 691
Daewoo	505, 524, 526, 529, 530, 531, 532, 698, 712, 719
Daytron	526, 695
Dixi	532, 588, 620
Dumont	695
Electrohome	526, 573, 709, 713
Elta	532
Emerson	526, 527, 528, 533, 534, 535, 536, 537, 538, 539, 540, 541, 573, 622, 691, 692, 695, 696, 699, 720
Envision	506, 712
Etron	532
Fisher	542, 590
Formenti	611
Fortress	573, 605
Fujitsu	534, 694

Futuretech         541, 691, 694           General Electric (GE)         503, 508, 509, 515, 540, 540, 543, 544, 630, 695, 698, 701, 714, 715, 716           Genexxa         613           Goldstar         505, 523, 526, 545, 546, 573, 588, 693, 712           Granada         695, 711           Granda         695           Grandiente         711           Grundig         547           Hallmark         695           Harman Kardon         561           Hinari         534           Hitachi         523, 526, 548, 549, 550, 551, 552, 553, 554, 555, 588, 597, 626, 702, 718           Infinity         566           JC Penney         503, 505, 506, 516, 526, 531, 543, 596, 701, 714           Jensen         556, 573           JVC         557, 558, 559, 560           Kawasho         548, 561, 712           Kenwood         506, 573, 712           Kloss         522, 561, 610, 698           KTV         526, 539, 540, 541, 691, 691, 696, 712           Lloyds         695           Lloytron         526           Loewe         588           Logik         518           LxI         503, 563, 566, 590, 595, 614, 617, 625, 701           Magnavox	Funai	534, 541, 691, 694
(GE)         543, 544, 630, 695, 698, 701, 714, 715, 716           Genexxa         613           Goldstar         505, 523, 526, 545, 546, 573, 588, 693, 712           Granada         695, 711           Grandente         711           Grandiente         711           Grundig         547           Hallmark         695           Harman Kardon         561           Hitachi         523, 526, 548, 549, 550, 551, 552, 553, 554, 555, 558, 597, 626, 702, 718           Infinity         566           JBL         566           JC Penney         503, 505, 506, 516, 526, 526, 531, 543, 596, 701, 714           Jucc         557, 558, 559, 560           Kawasho         548, 561, 712           Kenwood         506, 573, 712           Kloss         522, 561, 610, 698           KTV         526, 539, 540, 541, 691, 691, 696, 712           Lloyds         695           Lloytron         526           Loewe         588           Logik         518           Luxman         523           Logik         518           Luxman         523           Magnasonic         573           Magnavox         506, 566, 567, 568, 56	Futuretech	541, 691, 694
Goldstar 505, 523, 526, 545, 546, 573, 588, 693, 712  Granada 695, 711  Grand 695  Grandiente 711  Grundig 547  Hallmark 695  Harman Kardon 561  Hinari 534  Hitachi 523, 526, 548, 549, 550, 551, 552, 553, 554, 555, 558, 597, 626, 702, 718  Infinity 566  JBL 566  JC Penney 503, 505, 506, 516, 526, 531, 543, 596, 701, 714  Jensen 556, 573  JVC 557, 558, 559, 560  Kawasho 548, 561, 712  Kenwood 506, 573, 712  Kloss 522, 561, 610, 698  KTV 526, 539, 540, 541, 691, 696, 712  Lloyds 695  Lloyds 695  Loewe 588  Logik 518  Luxman 523  LXI 503, 566, 560, 566, 590, 595, 617, 625, 573, 575, 610, 710, 712  Magnasonic 573  Magnavox 506, 520, 525, 536, 564, 566, 567, 568, 569, 573, 575, 610, 710, 712  Marantz 506, 566, 573, 588, 712  Matsui 532, 609  Megatron 695  Memorex 518, 532, 590, 695, 720		503, 508, 509, 515, 540, 543, 544, 630, 695, 698, 701, 714, 715, 716
573, 588, 693, 712  Granada 695, 711  Grand 695  Grandiente 711  Grundig 547  Hallmark 695  Harman Kardon 561  Hinari 534  Hitachi 523, 526, 548, 549, 550, 551, 552, 553, 554, 555, 588, 597, 626, 702, 718  Infinity 566  JC Penney 503, 505, 506, 516, 526, 531, 543, 596, 701, 714  Jensen 556, 573  JVC 557, 558, 559, 560  Kawasho 548, 561, 712  Kenwood 506, 573, 712  Kloss 522, 561, 610, 698  KTV 526, 539, 540, 541, 691, 696, 712  Lloyds 695  Lloytron 526  Loewe 588  Logik 518  Luxman 523  LXI 503, 563, 566, 590, 595, 617, 625, 701  Magnasonic 573  Magnavox 506, 520, 525, 536, 564, 569, 573, 578, 610, 710, 712  Marantz 506, 566, 567, 568, 569, 573, 578, 610, 710, 712  Marantz 506, 566, 573, 588, 712  Matsui 532, 609  Megatron 695  Memorex 518, 532, 590, 695, 720	Genexxa	613
Grand         695           Grandiente         711           Grundig         547           Hallmark         695           Harman Kardon         561           Hitachi         534           Hitachi         523, 526, 548, 549, 550, 551, 552, 553, 554, 555, 558, 597, 626, 702, 718           Infinity         566           JBL         566           JC Penney         503, 505, 506, 516, 526, 526, 531, 543, 596, 701, 714           Jensen         556, 573           JVC         557, 558, 559, 560           Kawasho         548, 561, 712           Kenwood         506, 573, 712           Kloss         522, 561, 610, 698           KTV         526, 539, 540, 541, 691, 696, 712           Lloyds         695           Lloytron         526           Loewe         588           Logik         518           Luxman         523           LXI         503, 563, 566, 590, 595, 596, 564, 565, 566, 577, 588, 569, 575, 610, 710, 712           Magnasonic         573           Magnavox         506, 566, 567, 588, 569, 575, 610, 710, 712           Marantz         506, 566, 567, 588, 569, 575, 610, 710, 712           Matsui         532, 609	Goldstar	505, 523, 526, 545, 546, 573, 588, 693, 712
Grandiente 711  Grundig 547  Hallmark 695  Harman Kardon 561  Hitachi 523, 526, 548, 549, 550, 551, 552, 553, 554, 555, 556, 556, 573  JVC 557, 558, 559, 560  Kawasho 548, 561, 712  Kenwood 506, 573, 712  Kloss 522, 561, 610, 698  KTV 526, 539, 540, 541, 691, 696, 712  Lloyton 526  Loewe 588  Logik 518  Luxman 523  LXI 503, 566, 573, 566, 590, 595, 617, 625, 701, 714  Magnasonic 573  Magnasonic 573  Magnavox 506, 520, 525, 536, 564, 565, 566, 573, 575, 610, 710, 712  Marantz 506, 566, 573, 588, 712  Marantz 506, 566, 573, 588, 712  Matsui 532, 609  Megatron 695  Memorex 518, 532, 590, 695, 720	Granada	695, 711
Grundig 547 Hallmark 695 Harman Kardon 561 Hinari 534 Hitachi 523, 526, 548, 549, 550, 551, 552, 553, 554, 555, 585, 597, 626, 702, 718 Infinity 566 JL 566 JC Penney 503, 505, 506, 516, 526, 531, 543, 596, 701, 714 Jensen 556, 573 JVC 557, 558, 559, 560 Kawasho 548, 561, 712 Kenwood 506, 573, 712 Kloss 522, 561, 610, 698 KTV 526, 539, 540, 541, 691, 696, 712 Lloyds 695 Lloytron 526 Loewe 588 Logik 518 Luxman 523 LXI 503, 563, 566, 590, 595, 617, 625, 701 Magnasonic 573 Magnavox 506, 520, 525, 536, 564, 569, 573, 575, 610, 710, 712 Marantz 506, 566, 573, 588, 712 Matsui 532, 609 Megatron 695 Memorex 518, 532, 590, 695, 720	Grand	695
Hallmark 695 Harman Kardon 561 Hinari 534 Hitachi 523, 526, 548, 549, 550, 551, 552, 553, 554, 555, 588, 697, 626, 702, 718 Infinity 566 JBL 5	Grandiente	711
Harman Kardon         561           Hinari         534           Hitachi         523, 526, 548, 549, 550, 551, 552, 553, 554, 555, 585, 597, 626, 702, 718           Infinity         566           JBL         566           JC Penney         503, 505, 506, 516, 526, 531, 543, 596, 701, 714           Jensen         556, 573           JVC         557, 558, 559, 560           Kawasho         548, 561, 712           Kenwood         506, 573, 712           Kloss         522, 561, 610, 698           KTV         526, 539, 540, 541, 691, 696, 712           Lloyds         695           Lloytron         526           Loewe         588           Logik         518           Luxman         523           LXI         503, 563, 566, 590, 595, 617, 625, 701           Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 565, 566, 567, 568, 569, 573, 678, 610, 710, 712           Marantz         506, 566, 567, 568, 569, 566, 573, 588, 712           Matsui         532, 609           Memorex         518, 532, 590, 695, 720	Grundig	547
Hinari 534 Hitachi 523, 526, 548, 549, 550, 551, 552, 553, 554, 555, 585, 597, 626, 702, 718 Infinity 566 JBL 566 JC Penney 503, 505, 506, 516, 526, 531, 543, 596, 701, 714 Jensen 556, 573 JVC 557, 558, 559, 560 Kawasho 548, 561, 712 Kloss 522, 561, 610, 698 KTV 526, 539, 540, 541, 691, 696, 712 Lloyds 695 Lloytron 526 Loewe 588 Logik 518 Luxman 523 LXI 503, 563, 566, 590, 595, 617, 625, 701 Magnasonic 573 Magnasonic 573 Magnavox 506, 520, 525, 536, 564, 565, 566, 573, 578, 712 Marantz 506, 566, 573, 588, 712 Matsui 532, 609 Megatron 695 Memorex 518, 532, 590, 695, 720	Hallmark	695
Hitachi 523, 526, 548, 549, 550, 551, 552, 553, 554, 555, 558, 597, 626, 702, 718  Infinity 566  JBL 566  JC Penney 503, 505, 506, 516, 526, 531, 543, 596, 701, 714  Jensen 556, 573  JVC 557, 558, 559, 560  Kawasho 548, 561, 712  Kenwood 506, 573, 712  Kloss 522, 561, 610, 698  KTV 526, 539, 540, 541, 691, 696, 712  Lloyds 695  Lloyds 695  Lloytron 526  Loewe 588  Logik 518  Luxman 523  LXI 503, 563, 566, 590, 595, 617, 625, 701  Magnasonic 573  Magnavox 506, 560, 520, 525, 536, 564, 566, 566, 573, 588, 712  Marantz 506, 566, 573, 588, 712  Matsui 532, 609  Megatron 695  Memorex 518, 532, 590, 695, 720	Harman Kardon	561
551, 552, 553, 554, 555, 585, 597, 626, 702, 718           Infinity         566           JBL         566           JC Penney         503, 505, 506, 516, 526, 531, 543, 598, 701, 714           Jensen         556, 573           JVC         557, 558, 559, 560           Kawasho         548, 561, 712           Kenwood         506, 573, 712           Kloss         522, 561, 610, 698           KTV         526, 539, 540, 541, 691, 691, 696, 712           Lloyds         695           Lloytron         526           Loewe         588           Logik         518           Luxman         523           LXI         503, 563, 566, 590, 595, 617, 625, 701           Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 568, 569, 573, 575, 610, 710, 712           Marantz         506, 566, 573, 588, 712           Matsui         532, 609           Memorex         518, 532, 590, 695, 720	Hinari	534
JBL         566           JC Penney         503, 505, 506, 516, 526, 531, 543, 596, 701, 714           Jensen         556, 573           JVC         557, 558, 559, 560           Kawasho         548, 561, 712           Kenwood         506, 573, 712           Kloss         522, 561, 610, 698           KTV         526, 539, 540, 541, 691, 696, 712           Lloyds         695           Lloytron         526           Loewe         588           Logik         518           Luxman         523           LXI         503, 563, 566, 590, 595, 617, 625, 701           Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 568, 569, 573, 578, 610, 710, 712           Marantz         506, 566, 573, 588, 712           Matsui         532, 609           Megatron         695           Memorex         518, 532, 590, 695, 720	Hitachi	551, 552, 553, 554, 555,
JC Penney         503, 505, 506, 516, 526, 531, 543, 596, 701, 714           Jensen         556, 573           JVC         557, 558, 559, 560           Kawasho         548, 561, 712           Kenwood         506, 573, 712           Kloss         522, 561, 610, 698           KTV         526, 539, 540, 541, 691, 696, 712           Lloyds         695           Lloytron         526           Loewe         588           Logik         518           Luxman         523           LXI         503, 563, 566, 590, 595, 617, 625, 701           Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 569, 575, 610, 710, 712           Marantz         506, 566, 573, 588, 712           Matsui         532, 609           Memorex         518, 532, 590, 695, 720	Infinity	566
Jensen         556, 573           JVC         557, 558, 559, 560           Kawasho         548, 561, 712           Kenwood         506, 573, 712           Kloss         522, 561, 610, 698           KTV         526, 539, 540, 541, 691, 696, 712           Lloyds         695           Loewe         588           Logik         518           Luxman         523           LXI         503, 563, 566, 590, 595, 617, 625, 701           Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 566, 567, 568, 569, 573, 575, 610, 710, 712           Marantz         506, 566, 573, 588, 712           Matsui         532, 609           Megatron         695           Memorex         518, 532, 590, 695, 720	JBL	566
JVC         557, 558, 559, 560           Kawasho         548, 561, 712           Kenwood         506, 573, 712           Kloss         522, 561, 610, 698           KTV         526, 539, 540, 541, 691, 696, 712           Lloyds         695           Lloytron         526           Loewe         588           Logik         518           Lxx         503, 563, 566, 590, 595, 617, 625, 701           Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 568, 569, 573, 578, 610, 710, 712           Marantz         506, 566, 573, 588, 712           Matsui         532, 609           Megatron         695           Memorex         518, 532, 590, 695, 720	JC Penney	
Kawasho         548, 561, 712           Kenwood         506, 573, 712           Kloss         522, 561, 610, 698           KTV         526, 539, 540, 541, 691, 696, 712           Lloyds         695           Lloytron         526           Loewe         588           Logik         518           Luxman         523           LXI         503, 563, 566, 590, 595, 617, 625, 701           Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 569, 575, 610, 710, 712           Marantz         506, 566, 577, 588, 712           Matsui         532, 609           Megatron         695           Memorex         518, 532, 590, 695, 720	Jensen	556, 573
Kenwood         506, 573, 712           Kloss         522, 561, 610, 698           KTV         526, 539, 540, 541, 691, 696, 712           Lloyds         695           Lloytron         526           Loewe         588           Logik         518           Luxman         523           LXI         503, 563, 566, 590, 595, 617, 625, 701           Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 569, 573, 578, 610, 710, 712           Marantz         506, 566, 573, 588, 712           Matsui         532, 609           Megatron         695           Memorex         518, 532, 590, 695, 720	JVC	557, 558, 559, 560
Kloss         522, 561, 610, 698           KTV         526, 539, 540, 541, 691, 696, 712           Lloyds         695           Lloytron         526           Loewe         588           Logik         518           Luxman         523           LXI         503, 563, 566, 590, 595, 617, 625, 701           Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 569, 573, 573, 575, 610, 710, 712           Marantz         506, 566, 567, 568, 569, 573, 588, 712           Matsui         532, 609           Megatron         695           Memorex         518, 532, 590, 695, 720	Kawasho	548, 561, 712
KTV         526, 539, 540, 541, 691, 696, 712           Lloyds         695           Lloytron         526           Loewe         588           Logik         518           Luxman         523           LXI         503, 563, 566, 590, 595, 617, 625, 701           Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 566, 567, 568, 569, 573, 575, 610, 710, 712           Marantz         506, 566, 573, 588, 712           Matsui         532, 609           Megatron         695           Memorex         518, 532, 590, 695, 720	Kenwood	506, 573, 712
696, 712  Lloyds 695  Lloytron 526  Loewe 588  Logik 518  Luxman 523  LXI 503, 563, 566, 590, 595, 617, 625, 701  Magnasonic 573  Magnavox 506, 520, 525, 536, 564, 565, 566, 567, 568, 569, 573, 575, 610, 710, 712  Marantz 506, 566, 573, 588, 712  Matsui 532, 609  Megatron 695  Memorex 518, 532, 590, 695, 720	Kloss	522, 561, 610, 698
Lloytron 526  Loewe 588  Logik 518  Luxman 523  LXI 503, 563, 566, 590, 595, 617, 625, 701  Magnasonic 573  Magnavox 506, 520, 525, 536, 564, 565, 566, 567, 568, 569, 573, 675, 610, 710, 712  Marantz 506, 566, 567, 588, 712  Matsui 532, 609  Megatron 695  Memorex 518, 532, 590, 695, 720	KTV	
Loewe         588           Logik         518           Luxman         523           LXI         503, 563, 566, 590, 595, 617, 625, 701           Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 565, 566, 567, 568, 569, 573, 575, 610, 710, 712           Marantz         506, 566, 573, 588, 712           Matsui         532, 609           Megatron         695           Memorex         518, 532, 590, 695, 720	Lloyds	695
Logik         518           Luxman         523           LXI         503, 563, 566, 590, 595, 617, 625, 701           Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 565, 566, 567, 568, 569, 573, 575, 610, 710, 712           Marantz         506, 566, 573, 588, 712           Matsui         532, 609           Megatron         695           Memorex         518, 532, 590, 695, 720	Lloytron	526
Luxman         523           LXI         503, 563, 566, 590, 595, 617, 625, 701           Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 565, 566, 567, 568, 569, 573, 575, 610, 710, 712           Marantz         506, 566, 573, 588, 712           Matsui         532, 609           Megatron         695           Memorex         518, 532, 590, 695, 720	Loewe	588
LXI 503, 563, 566, 590, 595, 617, 625, 701  Magnasonic 573  Magnavox 506, 520, 525, 536, 564, 565, 566, 567, 568, 569, 573, 575, 610, 710, 712  Marantz 506, 566, 573, 588, 712  Matsui 532, 609  Megatron 695  Memorex 518, 532, 590, 695, 720	Logik	518
Magnasonic         573           Magnavox         506, 520, 525, 536, 564, 565, 566, 567, 568, 569, 573, 575, 610, 710, 712           Marantz         506, 566, 573, 588, 712           Matsui         532, 609           Megatron         695           Memorex         518, 532, 590, 695, 720	Luxman	
Magnavox         506, 520, 525, 536, 564, 565, 566, 567, 568, 569, 573, 575, 610, 710, 712           Marantz         506, 566, 573, 588, 712           Matsui         532, 609           Megatron         695           Memorex         518, 532, 590, 695, 720	LXI	
565, 566, 567, 568, 569, 573, 575, 610, 710, 712  Marantz 506, 566, 573, 588, 712  Matsui 532, 609  Megatron 695  Memorex 518, 532, 590, 695, 720		
Matsui         532, 609           Megatron         695           Memorex         518, 532, 590, 695, 720	Magnavox	565, 566, 567, 568, 569, 573, 575, 610, 710, 712
Megatron         695           Memorex         518, 532, 590, 695, 720	Marantz	506, 566, 573, 588, 712
Memorex 518, 532, 590, 695, 720	Matsui	532, 609
	Megatron	695
	Memorex	
MGA 504, 505, 506, 571, 573, 695	MGA	504, 505, 506, 571, 573, 695

Mitsubishi	504, 505, 570, 571, 572, 597, 623, 695, 705, 707, 712
Montgomery Wards	505, 506, 515, 518, 534, 536, 543, 564, 565, 567, 568, 607, 619, 712, 714, 715
MTC	505, 506, 516, 523, 531, 695, 712
NAD	502, 617, 695
National	509, 697
National Quenties	697
NEC	505, 506, 507, 517, 523, 573, 627, 712
Nikkai	612, 613, 618
Nordmende	551
Normande	717
Novabeam	561, 698
Nyon	701
Onwa	541, 691
Optonica	605, 607
Orion	694
Osaki	612
Panasonic	508, 509, 510, 511, 512, 566, 574, 689, 697, 698, 700, 706, 714, 716
Philco	505, 506, 525, 536, 564, 565, 568, 573, 610, 712
Philips	566, 588
Pioneer	502, 548, 551, 576, 708
Portland	505, 526, 712
Proscan	503
Proton	513, 519, 526, 536, 585, 624, 695
Pulsar	501
Quasar	508, 509, 577, 698, 700
Radio Shack	526, 541, 607, 612, 691, 698
RCA	503, 505, 515, 548, 579, 580, 581, 582, 583, 584, 586, 587, 625, 633, 634, 691, 698, 701, 708, 714, 715, 716
Realistic	590
Saba	551
Saisho	532, 533, 609
Sampo	506, 519, 698
Samsung	505, 506, 516, 523, 526, 532, 588, 612, 695, 704, 712, 721
Samwon	620
Sanyo	542, 589, 590, 591, 592, 609
SBR	588
Schneider	588
Scott	526, 534, 537, 541, 593, 600, 691, 696, 701
Sears	503, 523, 534, 542, 563, 589, 590, 594, 595, 596, 598, 599, 601, 602, 603, 604, 617, 695, 703
Seimitsu	695
Sharp	526, 585, 591, 605, 606, 607, 608, 628, 629
Siemens	591

0	510
Signature	518
Silver	573
Solavox	612
Sony	500, 514, 521, 578, 609, 619, 622, 685, 686, 687, 688, 690
Soundesign	525, 536, 541, 691, 695
Spectricon	520, 620
Squareview	694
SSS	505, 541, 573, 691, 712
Supra	523
Supre-Macy	522
Sylvania	506, 525, 536, 564, 565, 566, 568, 573, 575, 600, 610, 611, 712
Symphonic	632, 692, 694
Tandy	605, 613
Tatung	509, 698
Technics	508
Techwood	523, 573
Teknika	504, 505, 516, 518, 522, 523, 524, 525, 526, 534, 536, 541, 614, 615, 691, 712
Teleavia	551
Telefunken	551
Teletech	532
Tera	513
Thomas	695
Thompson	709
Thomson	551, 616
TMK	523, 573, 695
Toshiba	516, 590, 596, 617, 618, 631
Tosonic	528
Totevision	526
Toyomenko	695
Universal	543
Vector Research	506
Victor	557
Video Concepts	570, 691
Vidtech	505, 695, 712
Viking	522
Yamaha	505, 506, 712
York	695
TOIK	
Zenith	501, 518, 693

## **VCRs**

Aiwa	588, 622, 623, 624
Akai	513, 514, 515, 516, 517, 518, 519, 520, 568
Alba	546
Amstrad	588
ASA	565
Audio Dynamics	594, 600
Broksonic	559
Bush	589
Candle	580, 592, 593

Canon	
	542, 553, 554
Capehart	543, 546
Citizen	591, 592, 593
Craig	591, 608
Croslex	553
Curtis Mathes	554, 592, 605
Daewoo	534, 545, 546, 547, 593
Daytron	546
DBX	594, 600
Dumont	549
Dynatech	588
Electrohome	609
Emerson	505, 506, 507, 508, 509, 510, 511, 512, 559, 568, 588, 590, 609, 618
Finlandia	549
Finlux	549, 565, 588
Fisher	548, 549, 584, 588, 608, 610
General Electric (GE)	550, 551, 552, 554, 572, 591, 605
Goldstar	530, 555, 592, 612, 613
Goodmans	585, 589
Go Video	557, 558, 620
Granada	549, 581
Grundig	565
Harman Kardon	530, 569
Hinari	589
Hitachi	536, 537, 538, 539, 540, 541, 553, 588, 595, 596, 597
Instant Replay	553
ITT	540
ITT	518
JC Penney	530, 554, 580, 591, 594, 600, 601
JC Penney Jensen	530, 554, 580, 591, 594,
JC Penney  Jensen  JVC	530, 554, 580, 591, 594, 600, 601 560 561, 562, 563, 564, 592, 594, 600, 601
JC Penney Jensen	530, 554, 580, 591, 594, 600, 601 560 561, 562, 563, 564, 592,
JC Penney  Jensen  JVC  Kenwood  Lloyd	530, 554, 580, 591, 594, 600, 601 560 561, 562, 563, 564, 592, 594, 600, 601 562, 581, 592, 594, 600, 601 588
JC Penney  Jensen  JVC  Kenwood  Lloyd  Logik	530, 554, 580, 591, 594, 600, 601 560 561, 562, 563, 564, 592, 594, 600, 601 562, 581, 592, 594, 600, 601 588
JC Penney  Jensen  JVC  Kenwood  Lloyd  Logik  Luxor	530, 554, 580, 591, 594, 600, 601 560 561, 562, 563, 564, 592, 594, 600, 601 562, 581, 592, 594, 600, 601 588 589 518
JC Penney  Jensen  JVC  Kenwood  Lloyd  Logik  Luxor  Magnavox	530, 554, 580, 591, 594, 600, 601 560 561, 562, 563, 564, 592, 594, 600, 601 562, 581, 592, 594, 600, 601 588 589 518 527, 553, 554, 556, 565, 665, 611
JC Penney  Jensen  JVC  Kenwood  Lloyd  Logik  Luxor  Magnavox  Marantz	530, 554, 580, 591, 594, 600, 601  560  561, 562, 563, 564, 592, 594, 600, 601  562, 581, 592, 594, 600, 601  588  588  518  527, 553, 554, 556, 565, 611  530, 554, 565, 585, 592, 594, 600, 601, 603
JC Penney  Jensen  JVC  Kenwood  Lloyd  Logik  Luxor  Magnavox  Marantz  MEI	530, 554, 580, 591, 594, 600, 601 561, 562, 563, 564, 592, 594, 600, 601 562, 581, 592, 594, 600, 601 588 589 518 527, 553, 554, 556, 565, 611 530, 554, 565, 585, 592, 594, 600, 601, 603
JC Penney  Jensen JVC  Kenwood  Lloyd Logik Luxor  Magnavox  Marantz  MEI  Memorex	530, 554, 580, 591, 594, 600, 601 560 561, 562, 563, 564, 592, 594, 600, 601 562, 581, 592, 594, 600, 601 588 589 518 527, 553, 554, 556, 565, 611 530, 554, 565, 585, 592, 594, 600, 601, 603 554 5533, 549, 554, 566, 581, 585, 588, 608
JC Penney  Jensen  JVC  Kenwood  Lloyd  Logik  Luxor  Magnavox  Marantz  MEI  Memorex  MGA	530, 554, 580, 591, 594, 600, 601 560 561, 562, 563, 564, 592, 594, 600, 601 562, 581, 592, 594, 600, 601 588 589 518 527, 553, 554, 556, 565, 611 530, 554, 565, 585, 592, 594, 600, 601, 603 554 533, 549, 554, 566, 581, 585, 588, 608
JC Penney  Jensen  JVC  Kenwood  Lloyd  Logik  Luxor  Magnavox  Marantz  MEI  Memorex  MGA  Mitsubishi	530, 554, 580, 591, 594, 600, 601 560 561, 562, 563, 564, 592, 594, 600, 601 562, 581, 592, 594, 600, 601 588 589 518 527, 553, 554, 556, 565, 611 530, 554, 565, 585, 592, 594, 600, 601, 603 554 533, 549, 554, 566, 581, 585, 588, 608 567, 568, 609 562, 567, 568, 569, 570, 571, 609
JC Penney  Jensen  JVC  Kenwood  Lloyd  Logik  Luxor  Magnavox  Marantz  MEI  Memorex  MGA	530, 554, 580, 591, 594, 600, 601 560 561, 562, 563, 564, 592, 594, 600, 601 562, 581, 592, 594, 600, 601 588 589 518 527, 553, 554, 556, 565, 611 530, 554, 565, 585, 592, 594, 600, 601, 603 554 533, 549, 554, 566, 581, 585, 588, 608
JC Penney  Jensen JVC  Kenwood  Lloyd Logik Luxor  Magnavox  Marantz  MEI  Memorex  MGA  Mitsubishi  Montgomery	530, 554, 580, 591, 594, 600, 601  561, 562, 563, 564, 592, 594, 600, 601  562, 581, 592, 594, 600, 601  588  589  518  527, 553, 554, 556, 565, 511  530, 554, 565, 585, 592, 594, 600, 601, 603  554  533, 549, 554, 566, 581, 585, 588, 588, 588, 608  567, 568, 609  562, 567, 568, 569, 570, 571, 609  527, 554, 580, 585, 588, 589, 591, 607, 608, 589, 590, 591, 607, 608, 589, 589, 590, 591, 607, 608, 589, 589, 590, 591, 607, 608, 589, 589, 589, 589, 581, 607, 608
JC Penney  Jensen JVC  Kenwood  Lloyd Logik Luxor  Magnavox  Marantz  MEI  Memorex  MGA  Mitsubishi  Montgomery Wards	530, 554, 580, 591, 594, 600, 601 560 561, 562, 563, 564, 592, 594, 600, 601 562, 581, 592, 594, 600, 601 588 589 518 527, 553, 554, 556, 565, 611 530, 554, 565, 585, 592, 594, 600, 601, 603 554 533, 549, 554, 566, 581, 585, 588, 608 567, 568, 609 562, 567, 568, 569, 570, 571, 609 527, 554, 580, 588, 588, 589, 590, 591, 607, 608, 609
JC Penney  Jensen JVC  Kenwood  Lloyd  Logik  Luxor  Magnavox  Marantz  MEI  Memorex  MGA  Mitsubishi  Montgomery Wards	530, 554, 580, 591, 594, 600, 601 560 561, 562, 563, 564, 592, 594, 600, 601 562, 581, 592, 594, 600, 601 588 589 518 527, 553, 554, 556, 565, 611 530, 554, 565, 585, 592, 594, 600, 601, 603 554 533, 549, 554, 566, 581, 585, 588, 608 567, 568, 609 562, 567, 568, 569, 570, 571, 609 527, 554, 580, 585, 588, 589, 590, 591, 607, 608, 609 544, 580, 588
JC Penney  Jensen JVC  Kenwood  Lloyd Logik Luxor  Magnavox  Marantz  MEI  Memorex  MGA  Mitsubishi  Montgomery Wards  MTC  Multitech	530, 554, 580, 591, 594, 600, 601 561, 562, 563, 564, 592, 594, 600, 601 562, 581, 592, 594, 600, 601 588 589 518 527, 553, 554, 556, 565, 611 530, 554, 565, 585, 592, 594, 600, 601, 603 554 533, 549, 554, 566, 581, 585, 588, 608 567, 568, 609 562, 567, 568, 569, 570, 571, 609 527, 554, 580, 585, 588, 589, 590, 591, 607, 608, 609 544, 580, 588

Olympic	553	
Optonica	585	
Orion	506, 507	
Panasonic	521, 522, 523, 524, 526, 553, 554, 598, 614, 628	
Pentax	537, 592	
Perdio	588	
Philco	553, 554, 611	
Philips	553, 554, 565, 585	
Pioneer	553, 562, 573, 574, 575, 576, 600	
Portland	546, 593	
Proscan	553, 605	
Pulsar	533	
Quartz	581	
Quasar	553, 554, 577, 578	
Radio Shack	607, 608, 609, 610	
RCA	525, 526, 527, 528, 529, 537, 553, 591, 605, 606, 615, 630, 631	
Realistic	549, 554, 580, 581, 584, 585, 588	
Ricoh	502	
Saisho	506, 507	
Salora	567, 581	
Samsung	517, 534, 579, 580, 591	
Sansui	532, 544, 562, 600, 621	
Sanyo	549, 581, 582, 583, 608	
SBR	565	
Schneider	589	
Scott	508, 559, 590	
Sears	548, 549, 581, 584, 608, 610	
Sentra	546	
Sharp	585, 607, 609, 625	
Shintom	589	
Sony	500, 501, 502, 503, 504,	
•	629	
Sylvania	553, 554, 567, 588, 611	
Symphonic	588, 594	
Tandy	588	
Tashiko	588	
Tatung	586, 594, 601	
Teac	588, 594, 601	
Technics	553, 554	
Teknika	554, 587, 588	
TMK	506	
Toshiba	534, 535, 567, 590	
Totevision	580, 591	
Unitech	580	
Vector Research	530, 600	
Victor	561, 562, 600	
Video Concepts	568, 600	
Videosonic	591	
Yamaha	530, 592, 594, 600, 601	
Zenith	500, 501, 533	
Note: The following part of this table is for DVD players only.		

DVD Players		
Note: You <i>must</i> set the remote control to VCR mode to set it up to control a DVD player. You <i>must</i> set the remote control to VCR mode to use it to control a DVD player		
Magnavox		626
Pioneer		619
RCA		627
Sony		617
Toshiba		616

## **TUNERS/AMPLIFIERS**

Aiwa	2656, 2680
Carver	2653
Fisher	2653
GE	2665
Goldstar	2677
JVC	2657, 2683
Kenwood	2676
Luxman	2681
LXI	2665
Marantz	2651
Memorex	2675
NAD	2669
Nakamichi	2671
Onkyo	2660, 2662, 2678
Optimus	2664
Panasonic	2652
Pioneer	2658, 2675, 2679
Proton	2654
Quasar	2652
RCA	2655
Realistic	2665, 2666
Scott	2659
Sherwood	2670
Sony	2667, 2668, 2672, 2673, 2674, 2680, 2684
Symphonic	2666
Technics	2652
Victor	2657
Yamaha	2663, 2682

# **CABLE TV BOXES**

Eastern	2649
GI/Tocom	2640
Jerrold	2635, 2636
Memorex	2637
Oak	2646
Panasonic	2637, 2644, 2645
Paragon	2637
Pioneer	2642, 2643
Regency	2649
Scientific Atlanta	2638, 2639, 2647, 2648, 2650
Zenith	2641

# TROUBLE-SHOOTING TABLE

What Is Happening	Possible Reason	What to Do
You cannot find the remote control.	You may have misplaced the remote control, or someone else may have it.	Use the receiver front panel Control Buttons to control the receiver until you find the remote. If the remote control is permanently lost or too damaged to use, call the Service Center to order a replacement. You will have to pay for the remote control, plus shipping and handling.
When you press the remote control Power button to turn the receiver ON, the receiver front panel Power light does not turn on.	You may not be able to see that the receiver Power light is on, if other lights in the room are too bright.  The remote control may not be operating properly or the batteries may be weak or dead.  The receiver power cord may not be plugged into a power outlet, or there may be a problem with the power.	Try other remote control buttons to see if the receiver is responding.  Replace the remote batteries with fresh ones.  Check that the receiver power cord is not damaged, and that the plug is inserted correctly into the outlet.
You set up the remote control for the TV mode. Then, you find that you cannot set up the remote control for the AUX mode.	A few remote controls have a problem when you set up the AUX mode after you set up the TV mode.	Do the following: (a) write down the TV code, (b) reset the TV mode using code 222, (c) set up the AUX mode, and (d) reset the TV mode using the code that you wrote down in step (a).

When you press a button on the remote control, the device does not do what you expect.	You may be trying to control a device other than the receiver, without pointing the remote control directly at the device.  The remote control may be missing batteries, the batteries may be incorrectly placed in the remote, or the batteries may be weak or dead.  The remote may not be set to the mode that matches the device you want to control.  The remote may not be set up to control the device.	Remember that the remote control uses IR signals to control devices other than the receiver. IR signals travel only 40 feet or less, and cannot go through walls or other solid objects. You must point the remote control directly at the device, with no objects blocking the line of sight.  If the batteries are missing or dead, insert fresh AAA-size batteries. If the remote has fresh batteries, check whether they are placed according to the label diagram. If not, remove them and place correctly.  Make sure to set the remote to the mode that matches the device that you want to control.  Make sure to set up the remote to control all the devices that you want to operate.
The system uses infrared (IR) remote control extenders (called "pyramids"). Electronic devices exhibit ultra-high frequency (UHF) interference.	The extenders use UHF signals to transmit signals from one room of the building to another. These signals may be causing the interference.	Temporarily stop using the extenders, to see whether this eliminates the interference. If the extenders are the source of the interference, you will have to avoid using them whenever you do not want interference with other devices that use UHF. This is because UHF signals travel 100 feet or more, and go through walls and other solid objects.
The system uses infrared (IR) remote control extenders (called "pyramids"). The IR remote control extenders do not seem to work.	The IR sensor on the extender that receives the remote control signals may not be facing the remote control. The IR cable on the extender that sends the signal to the receiver may not be right in front of the IR sensor on the receiver front panel.	Make sure the extender that receives the signal from the remote control is facing the right way, so that the IR sensor can receive the remote control signals. Make sure the IR cable on the extender that sends the signal to the receiver is right in front of the IR sensor on the receiver front panel, so that the receiver IR sensor can receive the signals. If doing the above does not solve the problem, contact the manufacturer of the extenders for help.

#### LIMITED WARRANTY

This warranty extends *only* to the original user of the DISH Network<sup>TM</sup> Remote Control ("you," "your") and is *limited* to the purchase price of the remote control. EchoStar Communications Corporation and its affiliated companies ("we," "our," "us") warrant this remote control against defects in materials or workmanship as follows.

For one year from the original date of purchase, if we find that the remote control is defective subject to the limits of this warranty, we will replace the remote at no charge for parts or labor. We warrant any such work done against defects in materials or workmanship for the remaining part of the original warranty period.

This warranty *does not cover* installation of the DISH Network<sup>TM</sup> System; consumer instruction; physical set up or adjustment of any consumer electronic device; remote control batteries; signal reception problems; loss of use of the equipment; unused programming charges due to equipment malfunction; cosmetic damage; damage due to lightning, electrical or telephone line surges, fire, flood, or other acts of Nature; accident; misuse; abuse; repair or alteration by other than our factory service; negligence; commercial or institutional use; improper or neglected maintenance; equipment sold AS IS or WITH ALL FAULTS; equipment removal or reinstallation; shipping damage if the equipment was not packed and shipped in the manner we prescribe; nor equipment purchased, serviced, or operated outside the contiguous United States of America.

REPLACEMENT AS PROVIDED UNDER THISWARRANTY IS YOUR EXCLUSIVE REMEDY. WE SHALL NOT BE HELD LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY ON THIS DEVICE, NOR FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE RESULTING FROM THE USE OF, OR INABILITY TO USE, THIS DEVICE. UNDER NO CIRCUMSTANCES SHALL OUR LIABILITY, IF ANY, EXCEED THE PURCHASE PRICE PAID FOR THIS DEVICE, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS DEVICE IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY. WE RESERVE THE RIGHT TO REFUSE TO HONOR THIS WARRANTY IF WE DETERMINE ANY OF THE ABOVE EXCEPTIONS TO HAVE CAUSED THIS DEVICE NOT TO HAVE PERFORMED PROPERLY. THIS WARRANTY SHALL BE VOID IF ANY FACTORY-APPLIED IDENTIFICATION MARK, INCLUDING BUT NOT LIMITED TO SERIAL OR CONDITIONAL ACCESS NUMBERS, HAS BEEN ALTERED OR REMOVED. THISWARRANTY SHALL ALSO BE VOID IF THE DEVICE HAS BEEN OPENED BY AN UNAUTHORIZED PERSON (with the exception of opening the battery cover).

#### **ADVANCE EXCHANGE PROGRAM**

Whether covered under this warranty or not, the Advance Exchange Program allows you to have replacement equipment shipped immediately to you (depending upon where you live, it could take up to three business days). Along with replacement equipment, you will receive a prepaid shipping label and instructions on how to return the defective equipment. The shipping cost for receiving replacement equipment and sending back the defective equipment is a one time fee based on EchoStar's competitive, bulk shipping rates and will be charged to your credit card.

If you do not ship the defective equipment back to EchoStar within ten days after receiving the replacement, your credit card will be charged the market price of the replacement. If you return the defective equipment *after* the ten days, you will receive a full refund less an administrative fee.

If damage to the defective equipment is found which DISH Network Service in its sole discretion determines is not covered by the warranty, we will charge your credit card our standard flat rate exchange fee.

This warranty gives you specific legal rights which may vary from state to state. Some states do not allow the exclusion or limitations of incidental or consequential damages, or allow limitations on the duration of an implied warranty, so those limitations may not apply to you.

#### IF YOU NEED HELP

- 1. Review this Guide.
- 2. See the Trouble-Shooting Table on pag e26.
- Call the DISH Network<sup>SM</sup> Service Center at 1-800-333-DISH (3474). Have the date of purchase and your customer account number ready.
- A Representative will assist you. He or she will try to troubleshoot any problem you may be having.
- 5. If the Representative finds that you should return the remote control, he or she will give you a telephone number to call to get a Return Authorization (RA) number. *Before shipping* any equipment to us, you *must* get a Return Authorization number.
- You must package returned equipment properly. Follow the instructions that the Representative gives you.
- 7. Write the RA number in large, clearly visible characters on the *outside* of the shipping box used to return the equipment. To avoid confusion and misunderstandings, we will return shipments without an RA number clearly visible on the outside of the box to you at your expense.

#### 8. We will:

- Check the remote control, including whether it is covered under the warranty.
- Replace any remote that we find is defective with a new or refurbished remote, if the defective remote is covered under the warranty. We will ship the replacement remote at our expense.
- If a defective remote is not covered under the warranty, we will tell you. We may assess you a flat rate charge for a replacement remote, including shipping and insurance.

## **Notes**

## **Notes**